

HySense QT100 / QT110 Flow Turbine



QT100/QT110 (formerly known as RE4)

The HySense QT range (formerly known as RE3,4 & 6) is an axial turbine flow rate meter. The turbine blade wheel is axially driven by the flow stream, rotating in proportion to the mean flow velocity. A non-contacting inductive pickup generates a pulse signal. These pulses are then directly converted into a flow measurement by the associate electronic instrumentation. An advantage of our flow measuring turbine are the integrated test points which enable additional measurements of pressure & temperature.



The QT106 is now available with CANopen sensors fitted for integration in to your existing CAN line opening up further measuring possibilities.

- Output signal analog or frequency
- Developed for mineral oils
- Allows bi-directional volume flow rate measurement
- Supplied with Pressure and Temperature Test Points
- Optional with Hydrotechnik ISDS
- Compact, high pressure design

Features

Calibration viscosity	30 cSt ¹
Output signal	frequency (square wave) / 4 ... 20 mA
Electrical meas. connector	6-pole (ISDS) or 5-pole device plug, M16 x 0.75
Protection type (EN 60529 / IEC 529)	IP 40
Material casing / turbine wheel	Aluminium AlZnMgCu 1.5 / 1.4122 or 1.0718
Material sealing	FKM

Technical data

Mounting orientation	arbitrary
Supply voltage U _b	12 ... 24 VDC
Current consumption	12 ... 15 mA (frequency) / 24 ... 31 mA (4 ... 20 mA)
Over-voltage protection	36 VDC
Response time	none (frequency) / 250 ms (4 ... 20 mA)
Medium temperature	max. 120 °C
Environmental / storage temperature	-20 ... +85 °C

Options & Ordering Information

	Output signal	Measuring range	Viscosity range	Measuring connector	Allowed working pressure			Error limits	Weight	Order number
		(l/min)	mm ² /s (cSt)		bar	MPa	PSI		g	
... with ISDS	QT 100 frequency (square wave)	1 ... 10	1 ... 30	ISO228-G¼	420	42	6,000	± 0.5 % ²	630	31V7-01-S-35.030
		2 ... 75	1 ... 100	ISO228-G¾					785	31V7-70-S-35.030
		9 ... 300	1 ... 100	ISO228-G1					1,125	31V7-71-S-35.030
		16 ... 600	1 ... 100	ISO228-G1¼	1,380	31V7-72-S-35.030				
	QT 110 analog 4 ... 20 mA	1 ... 10	1 ... 30	ISO228-G¼	420	42	6,000	± 0.7 % ³	740	31G7-01-S-35.030
		2 ... 75	1 ... 100	ISO228-G¾					895	31G7-70-S-35.030
		9 ... 300	1 ... 100	ISO228-G1					1,235	31G7-71-S-35.030
		16 ... 600	1 ... 100	ISO228-G1¼	1,490	31G7-72-S-35.030				
... without ISDS	QT 100 frequency (square wave)	1 ... 10	1 ... 30	ISO228-G¼	420	42	6,000	± 2.5 % ²	630	31V7-01-35.030
		7.5 ... 75	1 ... 100	ISO228-G¾					785	31V7-70-35.030
		15 ... 300	1 ... 100	ISO228-G1					1,125	31V7-71-35.030
		25 ... 600	1 ... 100	ISO228-G1¼	1,380	31V7-72-35.030				
	QT 110 analog 4 ... 20 mA	1 ... 10	1 ... 30	ISO228-G¼	420	42	6,000	± 2.7 % ³	740	31G7-01-35.030
		7.5 ... 75	1 ... 100	ISO228-G¾					895	31G7-70-35.030
		15 ... 300	1 ... 100	ISO228-G1					1,235	31G7-71-35.030
		25 ... 600	1 ... 100	ISO228-G1¼	1,490	31G7-72-35.030				

² of current reading ³ of final value